

SMS Release Notes

SMS 11.0.12 - Built November 8, 2012

This is a bug-fix release for SMS 11.0.

We strongly recommend uninstalling any beta versions of SMS 11.0 before installing to avoid a potential problem with conflicting installations. This version can patch SMS 11.0.7 through 11.0.11 (earlier versions require a full-install).

SMS 11.1 has now been distributed in beta form for almost two months and a full install is expected soon. Unless critical bugs are identified, this will be that last bug-fix release for version 11.0 of SMS.

Bugfixes

- 1. Error in converting a stamped coverage to a scatter set was resolved.
- 2. When loading a generic mesh in a .2dm file, with a template that does not correspond to the current model definition, SMS could crash. This problem was resolved to allow for preservation of the grid.
- 3. In some situations, when generating a drogue plot or particle trace animation, some of the particles were not getting the new timestep data. This has been resolved.
- 4. Fixed an error related to interpolation to nodes that are "inactive". All nodes now get interpolated data regardless of the state of the connected elements.
- 5. Calibration plots using the active data set did not update when changing to a completely different scatter set. This has been resolved.
- 6. Fixed a drawing order that caused annotation items to appear on top of the filmloop clock. The clock now appears on top.
- 7. Additional comments were added to the TUFLOW Flow Constriction dialog to make the units and coefficients more understandable.
- 8. Bug related to reading in a large RMA2 solution was resolved.
- 9. When SMS writes GIS data (or a coverage) as a ".mif"/".mid" pair, an extra "bound" record was being written. This has been corrected.
- 10. Calibration targets are now not drawn when the observation point falls in an inactive cell/element.
- 11. When framing the display, SMS now includes active grid frames.
- 12. Fixed erase behind labels to include the film loop clock

- 13. When creating data sets in the data set toolbox, if all arguments to an operation come from a single folder, the result will now be placed in the same folder.
- 14. Fixed a situation where the screen froze trying to display contour labels.

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SMS 11.0.11 - Built October 5, 2012

This is a bug-fix release for SMS 11.0.

We strongly recommend uninstalling any beta versions of SMS 11.0 before installing to avoid a potential problem with conflicting installations. This version can patch SMS 11.0.7 through 11.0.10 (earlier versions require a full-install).

Bugfixes

- 1. Several internal memory leaks were corrected.
- 2. How SMS saves the input wind file for the "Holland Symmetrical" hurricane option for wind in ADCIRC were corrected.
- 3. An error related to material sets in TUFLOW was corrected. SMS would lose track of which material set was assigned to a simulation when a project was saved and then read back in.
- 4. In some cases it appeared that SMS was deleting data sets from the Project Explorer. In reality, there were just some empty folders that were left in a simulation.
- 5. Clarification was made for the "Override Z values" option for TUFLOW in both the dialog and the documention.
- 6. In the dataset toolbox, when SMS creates a new data set, the activity was being computed from the resultant nodal activity. This caused single cell/element islands that were inactive to become active. This was changed to use the element activity of the input data sets to compute the resulting element activity.
- 7. The ordering of external files in the geometry component file (tgc) is now controlled by the order of the tree items to allow the user to control this explicity.
- 8. A crash when loading ADCIRC grid files was resolved. Some files had "Unexpected End of File" messages, and then crashed. They now read in correctly as they did with previous versions.
- 9. Error in the TUFLOW interface to "Force cell z to at or below the node z" was resolved. The option is now available without activating the "Set Channel Invert" elevation.
- 10. Inconsistent display of rasters corrected.

- 11. Error in the SMS steering of CMS-Wave and CMS-Flow was corrected to save the correct eta files.
- 12. A file pointer to a shape file was not released when SMS opens the file. This has been corrected.
- 13. A issue with user defined palettes was corrected. The first palette was always active when reloading a project. Now SMS looks for a named palette that was active when the project was saved. If that palette exists, it is made current.
- 14. SMS has been known to save an illegal material with an ID of zero when saving TUFLOW projects. This should not happen any more.
- 15. SMS allows two TUFLOW boundary condition coverages. They cannot be identical or TUFLOW will crash.
- 16. Fixed an issue of editing BC curves associated with arcs in a TUFOW coverage. Changing the curve used to change it for other copies. The distinction of multiple curves is now maintained.
- 17. Fixed a bug with how WAM grids read in native format are loaded into SMS.
- 18. Fixed output of GCL strings for RMA4 to not include the midside nodes.

SMS 11.0.10 – Built September 10, 2012

This is a bug-fix release for SMS 11.0.

We strongly recommend uninstalling any beta versions of SMS 11.0 before installing to avoid a potential problem with conflicting installations. This version can patch SMS 11.0.7 through 11.0.9 (earlier versions require a full-install).

Bugfixes

- 1. Additional documentation was added to the help manual on the AdH model control options.
- 2. A memory overflow error when triangulating is detected so that SMS does not crash when triangulating very large scatter sets. Several possible solutions to get the data loaded are suggested. A future enhancement will reduce memory requirements for triangulation. This also applies when merging two large scatter sets that cause SMS to try to retriangulate.
- 3. Fixed problem when loading STWAVE output files and converting the data sets to scalars. The conversion was creating scalar data sets with "0.0" values.
- 4. Fixed an issue with graphics when dragging an arc in the Map Module. During the drag, a phantom arc would appear offset from the arc that was being dragged.
- 5. Fixed a problem when forcing breaklines into a TIN that resulted in flat or degenerate triangles. No degenerate triangles should be created now.
- 6. A problem with RMA4 giving bad values at midside nodes was isolated and reported to the TABS team at ERDC. No update is expected.
- 7. A problem was resolved in the "Holland Symmetrical" hurricane option (NWS = 8).
- 8. Resolved an issue with calibration plots when multiple solutions exist.
- 9. Fixed spacing in the model wrapper when running AdH to match what is output in a command prompt. This makes the output more readable.
- 10. Fixed a crash when creating a telescoping grid for CMS-Flow.
- 11. Resolved an issue when reading a TUFLOW solution with overlapping elements at the confluence of two 1D tributaries. SMS deletes the longer (skinnier) triangles that were overlapping, but still reads the data sets for visualization. When these cross sections are properly constructed, there should not be overlapping triangles.
- 12. Made change so that when user tries to open the HURDAT database, SMS switches to geographic coordinates to support the data if possible.
- 13. Fixed crash related to SMS trying to switch into PBL model even though the interface is not licensed.

- 14. Resolved a situation which caused SMS to freeze when dragging a coverage to another location in the project explorer (in Map Module or in a TUFLOW simulation).
- 15. Clarified the management of linear –vs- quadratic elements in the mesh module. If both types are permissible, SMS now asks the user to specify the desired type. The default is set to quadratic if quadratic elements exist of when working with TABS or FESWMS. Otherwise, the default is linear.
- 16. Fixed a crash when loading multiple map files into SMS.
- 17. Added check to verify validity of a coastline file before reading to prevent crash.
- 18. Fixed a situation where SMS assigns the wrong material type to polygons created during a conversion from a mesh.
- 19. Added support for "TD Card" (the global time step) when converting SMS 10.1 generic model templates to SMS 11.0 format.
- 20. Added a warning to let users of the generic model interface be informed that just reading a 10.1 template will not allow use of an 11.0 generic model version.
- 21. Fixed conversion of air density for FESWMS when switching from customary units to SI.
- 22. Implemented a change to maintain the material set assignments for TUFLOW simulations for an SMS project when saving and reopening the project.
- 23. Corrected a linkage problem with scatter data sets being lost when deleting other data sets.
- 24. Clarified the documentation and prompts when using the "override Z values" options in the TUFLOW interface. The model supports several options that were causing confusion among users.
- 25. Added a right click command in the 1D-2D connections coverage properties to allow users to select the boundary condition coverage to use with 1D-2D connections in the TUFLOW interface.
- 26. Fixed a problem with CMS-Flow/CMS-Wave steering that was preventing the "eta" or surge file from being passed to the wave model after a flow simulation.
- 27. Fixed a problem with the names of rasters being reset to default value after saving

SMS 11.0.9 – Built August 6, 2012

This is a bug-fix release for SMS 11.0.

We strongly recommend uninstalling any beta versions of SMS 11.0 before installing to avoid a potential problem with conflicting installations. This version can patch SMS 11.0.7 and 11.0.8(earlier versions require a full-install).

Bugfixes

- 1. Fixed an issue in the CMS-Flow model wrapper to ensure the run time would update.
- 2. Fixed a problem with the names of rasters being reset to default value after saving and reloading an SMS project.
- 3. Fixed problem with visualization mode to support quadratic elements. This allows switching between visualization mode and TABS without problems.
- 4. Fixed error in computing flux across an observation arc. Documented that insufficient resolution, either by saving only TUFLOW corners, or by unrepresented AdH refinement can cause errors in computed flux.
- 5. Fixed bug with bad air mass density when converting from customary units to SI and back
- 6. Fixed bug with node labels that stayed visible when nodes were turned off.
- 7. Fixed display of node numbers so that they do not overlap nodal elevations when both are turned on.
- 8. Fixed a problem with the name that was written to the "mp" file for CMS-Flow when extracting both WSE and velocities along a boundary cellstring.
- 9. Fixed a bug when reading in "2dm" file boundary condition on a deleted node string.
- 10. Fixed issue with the display of vectors after the mesh is turned off.
- 11. Fixed a crash in the AdH materials property dialog when using sediments.
- 12. Fixed a tolerance issue when using the Paving function with geographic coordinates and inserting a new mesh into an existing mesh.
- 13. Fixed crash when trying to open an STWAVE .sim file as a CMS Wave .sim file.
- 14. Fixed a bug with the TUFLOW 2D Model Control switching from a Coverage selector to an edit field.
- 15. Fixed a crash that occurred sometimes when exporting TUFLOW files.

SMS 11.0.8 – Built July 3, 2012

This is a bug-fix release for SMS 11.0.

We strongly recommend uninstalling any beta versions of SMS 11.0 before installing to avoid a potential problem with conflicting installations. This version can patch SMS 11.0.7 (earlier versions require a full-install).

Bugfixes

- 1. Fixed an error with exporting STWAVE simulation files.
- 2. Fixed a bug that where SMS was crashing when trying to remesh a portion of a mesh when quadratic elements were used.
- 3. Fixed an issue where nodestring IDs were not read in correctly.
- 4. Fixed a problem where some image files did not display until another item was read in.
- 5. Fixed a problem with the generation of damping cellstrings for BOUSS2D.
- 6. Corrected an issue first seen in SMS 11.0.4 where internal arcs were not handled correctly when creating a 2D mesh.
- 7. Allowed negative values for TUFLOW output start times since TUFLOW allows negative times.
- 8. Fixed an issue with ADH iteration controls not reading/writing correctly.
- 9. Fixed a crash that sometimes happened when converting GIS data to feature objects.
- 10. Fixed a problem where the initial contour display was a solid blue rather than specified values.
- 11. Corrected a problem where TUFLOW material sets were put into folders incorrectly.
- 12. Fixed an issue where SMS was creating bad triangles when merging scattersets.
- 13. Dragging of feature nodes now displays connecting lines while dragging.
- 14. Removed an incorrect model check warning when using extracted boundary conditions with CMS-FLOW.
- 15. Fixed a crash that sometimes happened when opening two tcf files at the same time.
- 16. Various bugfixes from software crash reports.

SMS 11.0.7 - Built May 31, 2012

This is a bug-fix release for SMS 11.0.

We strongly recommend uninstalling any beta versions of SMS 11.0 before installing to avoid a potential problem with conflicting installations. This version requires doing a full install (no update patch for this version).

Bugfixes

- 1. PTM will no longer show not licensed when run from SMS using a single user lock.
- 2. Mesh quality not displayed when a mesh is turned off in the project explorer.
- 3. Datasets are preserved when saving/loading a project file which wasn't always working.
- 4. When displaying labels on scalar values at mesh nodes, the labels could disappear sometimes. This has been fixed.
- 5. Fixed a problem where reading certain mif/mid files crashed SMS.
- 6. Fixed a problem where SMS was hanging when cleaning/merging arcs.
- 7. SMS sometimes gave an error message "Unable to write file path for keyword ":NEIGHBOR FILE" when saving an SMS project.
- 8. Fixed a problem where SMS would freeze trying to perform zonal classification.
- 9. The CMS-FLOW folder was reorganized to allow 32 and 64 bit executables to both work
- 10. Sometimes SMS was not maintaining the folder structure for loaded XMDF dataset files.
- 11. Fixed a problem where zonal classification was not working correctly for Cartesian grids.
- 12. TUFLOW events now prevent commas from being used as they don't work with the TUFLOW file formats.
- 13. Fixed an issue where right-clicking on coverage and choosing Map->2D Mesh would operate on the active coverage rather than the one clicked on.
- 14. Fixed a problem where the TUFLOW files for geometry components were written out incorrectly when multiple components exist.
- 15. Fixed an update problem when using user defined palettes.
- 16. Fixed a problem where rotating could cause parts of a functional surface to disappear.
- 17. Fixed a problem where the data calculator was not correctly using inactive cells for CMS-FLOW.
- 18. Fixed a location where SMS was giving a prompt that the project had changed when it hadn't.
- 19. Changed SMS to not reframe when performing a map->2D mesh.
- 20. Fixed a crash when working with user defined tidal constituents in ADCIRC.

- 21. Fixed an issue where breaklines of a scatterset were being displayed even though the scatterset was turned off in the project explorer.
- 22. Fixed a problem where the runtime wasn't being updated when running CMS-FLOW.
- 23. Turned off a bogus model checker when using CGWAVE when using approximated wave conditions.
- 24. Fixed a series of bugs related to setting up a generic model template.
- 25. Fixed an issue where SMS was not writing the correct number of frequencies to the STWAVE .eng file.

SMS 11.0.6 – Built May 4, 2012

This is a bug-fix release for SMS 11.0. This is a special update to address a couple specific issues that were introduced in 11.0.5 (items 1 & 2 below).

We strongly recommend uninstalling any beta versions of SMS 11.0 before installing to avoid a potential problem with conflicting installations. This version includes an update that can be installed on top of SMS 11.0.1 (sorry can't patch 11.0.0 due to an issue with our installation software).

Bugfixes

- 1. Fixed a bug that was introduced in SMS 11.0.5 where SMS would hang when trying to build polygons.
- 2. Included a file needed to check for AVI codecs to make sure they would work with SMS. This file is only needed for versions starting with SMS 11.0.5.
- 3. Fixed a minor issue where the welcome dialog reported that the SMS was a beta version.
- 4. Miscellaneous changes based upon crash logs sent from the software (bugtrap).

SMS 11.0.5 – Built April 25, 2012

This is a bug-fix release for SMS 11.0. We strongly recommend uninstalling any beta versions of SMS 11.0 before installing to avoid a potential problem with conflicting installations. This version includes an update that can be installed on top of SMS 11.0.1 (sorry can't patch 11.0.0 due to an issue with our installation software).

Bugfixes

- 1. Fixed a bug that caused SMS to freeze when using a large duplicate node tolerance.
- 2. Corrected the executable used by the BOUSS2D "1D Runup and overtopping calculator."
- 3. Fixed a problem where framing and switching to plan view could change the display of elements and nodes.
- 4. Tightened the tolerance used when loading RMA2 files to prevent curves from losing information when loading.
- 5. Fixed a problem that sometimes made the generic mesh interface hang.
- 6. Fixed a problem where the specified image projection was not written out causing the need to respecify the projection everytime the project was loaded.
- 7. Fixed a problem where portion of scatter set not displayed correctly when not filling above/below contour range.
- 8. SMS sometimes fouled up a polygon or crashed when moving nodes in the mesh attributes dialog (polygon attribute in mesh coverage).
- 9. Corrected an issue where the drogue times in the log file were not reported correctly.
- 10. Miscellaneous changes based upon crash logs sent from the software (bugtrap).

SMS 11.0.4 - Built March 3, 2012

This is a bug-fix release for SMS 11.0. We strongly recommend uninstalling any beta versions of SMS 11.0 before installing to avoid a potential problem with conflicting installations. This version includes an update that can be installed on top of SMS 11.0.1 (sorry can't patch 11.0.0 due to an issue with our installation software).

Bugfixes

- 1. Fixed a problem where sometimes a plot didn't generate correctly for arcs without interior vertices
- 2. SMS now closes STWAVE model files after running the model.
- 3. Fixed a problem that could occur when closing spectral energy plot and then reopening the plot.
- 4. Fixed an issue with the mesh quality min angle not working correctly.
- 5. Fixed an issue where the correct tidal constituents was not being displayed when using the Harmonic Analysis option with ADCIRC.
- 6. Fixed a problem with default values for nodestrings when using the generic mesh model.
- 7. Fixed a problem where the same coverage name in different folders couldn't be differentiated when using a coverage to display vectors.
- 8. Fixed a problem where ADH Iteration control parameters were not being saved.
- 9. Fixed a problem with reprojecting a Cartesian grid incorrectly reporting the minimum data value.
- 10. Fixed a problem with curve BC data when using the generic mesh model.
- 11. Fixed a problem where SMS was freezing when converting scatter breaklines to map.
- 12. STWAVE half-plane model only supports spectral energy at 5 degree direction bins. SMS was allowing users to specify a different angle which led to problems when running the model.
- 13. SMS was not handling the float/curve option for the generic mesh model correctly.
- 14. Fixed a problem where SMS gave a projection error message when loading an image even though the projection was valid.
- 15. Fixed a crash when trying to paste data into the cross-section attributes dialog.
- 16. Fixed a crash that could sometimes happen when redistributing vertices inside the polygon attributes dialog.
- 17. Fixed an issue with losing BC information specified using the generic model interface.
- 18. Fixed a problem where the spectral index wasn't being saved correctly.
- 19. Fixed a problem in how STWAVE with breaking datasets when using XMDF dataset output.

- 20. Fixed an issue where SMS incorrectly told the user the STWAVE data had changed after saving a file.
- 21. Made it so that you can control which raster is the active raster.
- 22. Fixed a problem with zoom to raster item.
- 23. Made it so SMS would switch modules if you clicked the root raster item.
- 24. Add raster module to right-click switch modules in empty area of project explorer.
- 25. Fixed a problem where SMS could freeze when trying to build polygons.
- 26. Fixed an incorrect model check when working with the CGWAVE model.
- 27. Fixed a problem with launching generic mesh models.
- 28. Fixed a crash that could occur when specify custom tidal constituents for ADCIRC.
- 29. Fixed a crash that could sometimes happen when using functional surfaces and moving windows
- 30. Made it so SMS correctly used the projection associated with a scatterset when reading.
- 31. Corrected an issue where datasets created in the dataset calculator could end up in the hotstarts datasets when using ADH.
- 32. Fixed a problem where the meshing preview in the polygon attributes dialog for mesh coverages could mess up the polygon's arcs.
- 33. Fixed a crash with PTM and trap files.
- 34. Fixed a problem where an error message similar to "No dataset specified for interpolation" when using observation plots with scattersets.
- 35. Fixed a crash that could sometimes happen when specifying global parameters for a generic mesh model.
- 36. Fixed an error where SMS gave a generic error message when trying to run STWAVE that did not identify the problem.
- 37. Fixed a problem where incorrect model setup for WAM could lead to a crash when trying to run the model.
- 38. Fixed a problem where contours were not being displayed for elements that were wet but being treated as dry.

SMS 11.0.3 - Built Jan 27, 2012

This is a bug-fix release for SMS 11.0. We strongly recommend uninstalling any beta versions of SMS 11.0 before installing to avoid a potential problem with conflicting installations. This version includes an update that can be installed on top of SMS 11.0.1 (sorry can't patch 11.0.0 due to an issue with our installation software).

Bugfixes

- 1. Fixed a problem where the name of a spectral grid for CMS-Wave was not preserved.
- 2. Fixed a problem where grid frames could "disappear" behind other data and not select correctly.
- 3. Fixed a crash that could happen when trying to convert a mesh to a map.
- 4. Changed SMS to allow small damping cellstrings for the BOUSS2D model.
- 5. Fixed a problem with generating cellstrings for BOUSS2D where no cellstring was created on the right side of the grid.
- 6. Fixed a problem with the generic model interface where boundary condition values were lost after opening and saving.
- 7. Fixed a crash that sometimes could happen when using texture mapping.
- 8. Fixed a crash that could happen when using the steering module with CMS-Flow/CMS-Wave.
- 9. Made it so you could replace the generic model definition being used without deleting the geometry.
- 10. Fixed a problem that caused element labels to print very small at times.
- 11. Fixed an issue where SMS would set the ADCIRC output files to binary if the output information wasn't complete. This made it impossible to get back to ASCII files without editing the files by hand.

SMS 11.0.2

This is a bug-fix release for SMS 11.0. We strongly recommend uninstalling any beta versions of SMS 11.0 before installing to avoid a potential problem with conflicting installations. This version includes an update that can be installed on top of SMS 11.0.1 (sorry can't patch 11.0.0 due to an issue with our installation software).

Bugfixes

- 1. Problem selecting cells in the spectral energy dialog.
- 2. Fixed a crash that could happen if you didn't have a scatter dataset and then converted it to mesh and then to map.
- 3. Fixed an issue where mesh elements were not displayed according to the setting in the display options dialog after generating a mesh using LTEA.
- 4. Fixed an issue where SMS stored the wrong directory if the user had to path to find the LeProvost files.
- 5. Fixed an issue with the LTEA mesh generation feature where SMS was not redistributing the ocean boundary based upon the user specification.
- 6. Fixed an issue where LTEA had spurious error messages pop-up during the meshing process.
- 7. SMS would sometimes write the wrong timestep when saving datasets to a tabular data file (*.txt).
- 8. ADH nodestring symbols were not displayed correctly after loading the simulation until the user went to the boundary condition dialog. This has been fixed.
- 9. SMS was not allowing CMS-Wave structure cells to have a negative modification value but this is valid in some cases.
- 10. Fixed an issue with the CMS-Wave model control parameters dealing with spreadsheet rows disappearing and not resizing correctly.
- 11. Fixed a crash that happened sometimes after duplicating a CMS-Wave grid.
- 12. Fixed a problem where the clock for first frame in a filmloop was not being displayed correctly if the starting time was not 0.0.
- 13. Fixed a problem where 1D mif files were not imported correctly into SMS when loading a tcf file.
- 14. Fixed a crash with running STWAVE full-plane after loading a project created with an earlier version of SMS.
- 15. SMS was not correctly interpreting some of the parameters correctly when importing STWAVE model files.
- 16. Fixed a hang when copy/pasting values into the time-series editor used with ADH.
- 17. STWAVE executable fixed to write datasets correctly.

- 18. Zonal classification could sometimes identify polygons incorrectly.
- 19. Auto-zmag was not updating when a new mesh was created until a frame or similar command was issued.
- 20. SMS was not correctly remembering specified raster projection after saving/loading a project.
- 21. In geographic projections, SMS was labeling x locations "east" that should have been labeled "west."
- 22. The raster contours sometimes changed after going to the display options dialog even when not changing the contour settings.
- 23. The 2D Gridframe was sometimes hidden behind raster.
- 24. Typo fixed in the menu for data calculator.
- 25. STWAVE boundary conditions dialog not "cutting" a row correctly.
- 26. Fixed crash when loading a project with 1D elements created in an earlier version of SMS.
- 27. Made it so you can specify paths to sediment datasets in xmdf file.
- 28. Fixed problem displaying functional surfaces with ati card.
- 29. Changed how LandXML files read to correctly identify "Northing" then "Easting."
- 30. SMS was incorrectly identifying elements as duplicates and removing them.
- 31. Fixed problem with local projection in mif/mid files.
- 32. Fixed crash when snapping two feature points.
- 33. STWAVE files not exported correctly when wind datasets being used.
- 34. Changed how we handle projections read when importing STWAVE model files so non-state plane coordinates are better handled.
- 35. Converting a raster to scatter created voids in the data.
- 36. Fixed saving tidal harmonics settings in ADCIRC model control.
- 37. You can now select all the points in a raster (before the top values sometimes weren't selecting).

SMS 11.0.1

This is a bug-fix release for SMS 11.0. We strongly recommend uninstalling any beta versions of SMS 11.0 before installing to avoid a potential problem with conflicting installations.

Bugfixes

- 1. Fixed a bug where reprojecting a TUFLOW grid was not updating all of the z values correctly.
- 2. Fixed an issue where RMA2 mid-side nodes were not retaining their elevation data after saving/loading.
- 3. Fixed a couple minor issues with the Map->scatter dialog.
- 4. Made it so SMS would preserve the order of nodestrings from the ADH .bc file.
- 5. Fixed a problem with ADCIRC fort.23 files that were reloading incorrectly.
- 6. Fixed a crash that could occur when copy/pasting when making irregular culverts in TUFLOW.
- 7. Fixed a problem where the functional surface legend was obscured by other data rather than being above the other data.